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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,525	12/08/2003	Agapios Kyriacos Agapiou	2001U039.US	4271
7590 03/13/2006			EXAMINER	
KEVIN M. FAULKNER UNIVATION TECHNOLOGIES, L.L.C. SUITE 1950 5555 SAN FELIPE ST. HOUSTON, TX 77056-2746			PASTERCZYK, JAMES W	
			ART UNIT	PAPER NUMBER
			1755	
DATE MAILED: 03/13/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/730,525

Applicant(s)

AGAPIOU ET AL.

Examiner

J. Pasterczyk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/15/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-9, 12, 17-22, 24-31 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-9, 12, 17-22, 24-31 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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1. This Office action is in response to the RCE amendment and executed Rule 132 declaration filed 2/15/06 and refers to the final Office action mailed 9/15/05 and the executed Rule 132 declaration filed 12/9/05.

2. Claims 7, 12 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7, 12 and 34 now depend from cancelled claims, hence it is not clear what their limitations are supposed to be.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-3, 7-9, 12, 17-22, 24-31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCullough as cited in the previous Office action.

The disclosure of McCullough has been discussed extensively in previous Office actions.

McCullough, while broadly disclosing the particle size of the present invention at paragraph 0078, specifically discloses a particle size for the support barely outside the range now claimed in its example 4.

However, given the teaching of McCullough, use of a catalyst support having a support with the particle size of the presently-claimed invention would have been well within the skill of the routineer in the art to achieve.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of McCullough with a reasonable expectation of obtaining a highly-useful method of making olefin copolymers with the expected benefit of the process having higher productivity.

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5. Applicant's arguments filed 2/15/06 have been fully considered but they are not persuasive.

Applicants urge in their executed Rule 132 declaration filed concurrently with the RCE papers that chloride and fluoride are sufficiently similar elements that the showing in the executed Rule 132 declaration of 12/9/05 is sufficient to overcome the inherency rejection then in force. However, there are in fact vast differences between fluorine and chlorine. The former is the most electronegative element extant, forms exceedingly stable bonds with carbon, and has a very small covalent and ionic radius; chlorine by contrast is much less electronegative, forms less stable bonds with carbon, and has greater covalent and ionic radii than fluorine. Fluorine is an exceedingly powerful oxidizing agent, while chlorine is less so. These factors alone would suggest that while chlorine and fluorine are both halogens and can display a formal 1- oxidation state, nevertheless in further detailed examinations of their chemistry, they are quite different, sufficiently so that a metallocene zirconium fluoride vs. the chloride analog would not be good comparisons.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Pasterczyk

AU 1755

3/6/06



J. A. LOBENGO  
SUPERVISORY PATENT EXAMINER